NSU NOVA SOUTHEASTERN UNIVERSITY Abraham S. Fischler School of Education

Innovate: Journal of Online Education

Volume 3
Issue 4 *April/May 2007*

Article 2

5-1-2007

Schools, Children, and Digital Technology: Building Better Relationships for a Better Tomorrow

Mark van't Hooft

Schools, Children, and Digital Technology: Building Better Relationships for a Better Tomorrow

Schools, Children, and Digital Technology: Building Better Relationships for a Better Tomorrow

by Mark van 't Hooft

Today's K-12 students are different from students twenty, ten, or even five years ago. Many of them communicate, learn, and think in ways that adults often do not understand. While kids are not afraid to use innovative digital tools such as blogging and repurpose them for their own uses, adults are usually more cautious. In fact, rather than appreciating the varied and often creative ways in which young people make use of new technologies, adults tend to be wary or even afraid of digital tools and seek to strengthen restrictions on their use in schools and libraries. The recent MySpace debate and proposed federal legislation like the ill-fated Delete Online Predators Act (DOPA) in 2006 and the Protecting Children in the 21st Century Bill (2007) as well as state attempts at regulation like the Social Networking Website Prohibition Bill (2007) in the Illinois State Legislature can attest to that. Many schools in the U.S. have banned the use of blogging sites like LiveJournal and Xanga and social sharing and networking sites like MySpace and Friendster. Pope John XXIII Regional High School in Sparta, NJ (Calo 2005) and South Valley Middle School in Gilroy, CA (CBS Broadcasting, Inc. 2006) are just two examples of such schools. Meanwhile, the latest increase in technology use and online activity by kids has been driven by the virtual explosion of almost free online technologies that allow users to produce, share, and communicate and the increasing limitations on children's physical boundaries (Cauchon 2005; Romeo 2004). As a result, a new digital divide has emerged, one that is defined by a generation or participation gap and characterized by a lack of understanding and trust between adults and children.

While school restrictions regarding technology use are typically justified by the desire to enhance student safety and to remove distractions from student learning, such measures often aggravate rather than resolve complex problems arising from the new conditions of the digital era. One major difficulty is the fact that policing student expression online cannot be done without regulating the lives of students outside of school, which, in turn, raises civil rights issues. A second is that such restrictions arise even as schools are failing to teach with and about new digital tools and technologies, much to the discontent of students. Third, this punitive approach blames technology for behavior that is rooted in wider social problems and in the psychological issues that characterize adolescence.

This article addresses the fundamental implications of the knee-jerk reactions that have led many schools to restrict access to digital resources for their students. It begins with a brief overview of what technologies are being used by school-age children, how they are being used, and why they are so popular. More importantly, it provides recommendations for what schools could be doing to help students fully understand the implications of using online digital tools and to teach children how to use them in safe, ethical, and meaningful ways.

Many Kids, Many Technologies, Many Uses: What's the Draw?

Members of the Net Generation are connected and technologically savvy, and they see technology as an essential part of their lives (Education Evolving 2005; NetDay 2005; Wallis 2006). Research by the Pew Internet and American Life Project has found that 87% of teenagers aged 12-17 use the Internet and that 51% do so on a daily basis. This use involves a rich spectrum of purposes that has broadened in recent years to include playing games (81% of teen users), gathering news (76%), shopping (43%), and researching health issues (31%) (Lenhart, Madden, and Hitlin 2005, 2). Moreover, many teenagers are using the Internet to communicate via social networking sites such as MySpace and Xanga, blogs, chatrooms, and social sharing sites such as flickr and YouTube. According to the Nielsen NetRatings for April of last year (2006),

MySpace had more than 38 million unique visitors, many of them teenagers; Blogger, Classmates Online, and the video-sharing site YouTube also saw millions of users (Harris 2005; NetDay 2005; Prensky 2004).

While teenagers are driven by a range of motives in their technology use, a major factor in the rapid growth of online activity is simply the desire to connect with others. Teenagers visit social networking sites and use communication tools to make friends, form social groups, and develop their personal identities (Boyd 2006; Romeo 2004). This behavior is an expression of ordinary adolescent development and socialization (Santrock 1993); as such, it is not all that different from the behavior of adolescents in previous generations. What *is* different is that the ever stricter limits on teenagers' physical space and the age-old desire of young people to escape adult supervision have pushed more teenage activities online and out of the physical world. In the 1950s, 1960s, and 1970s, kids would run and bike all over the neighborhood with their friends, and teenagers would hang out at local hamburger joints, drive-ins, or, eventually, shopping malls. Now that some malls are banning teenagers without adult supervision and parents are less likely to allow their children to be unsupervised in public spaces, the next logical step for teenagers is to go online. "By going virtual, digital technologies allow youth to (re)create private and public youth space while physically in controlled spaces" (Boyd 2006, "Digital Publics" ¶8). For teenagers, the digital media that schools and parents too often see as dangerous are essential avenues for expression and socialization.

A significant implication of this has been that teens have, in many respects, rewritten the rules of socialization. Whereas teenagers in the past would focus primarily on their physical appearance and behavior, many of them are now more preoccupied with creating digital profiles and learning how to present themselves online in order to be validated by peers (Boyd 2006). The rules regulating peer pressure have changed as well. As one student suggested recently in *USA Today*: "A lot of people get profiles because they feel obligated to have one. Like 'Everybody in my class has a MySpace, so I should get one, too.' But having a MySpace profile is still OK, even if it has caught on" (Kornblum 2006, "Too Popular?" ¶2). The result is that many teenagers now spend time in a world that is both real and virtual, and adults generally misunderstand the relationship between the two in the lives of adolescents.

School Policies and Misguided Responses

Many parents are unaware of what their children are doing on the Internet, and schools have a difficult time dealing with kids who spend increasing amounts of time online. The initial reaction has been to ban and punish rather than learn and educate. While issues of child safety and learning distractions should concern adults, banning digital tools that teenagers use inside and outside of school has created additional and complex issues.

Schools Interfering in Students' Lives Off Campus

Because the online world and new technologies are blurring boundaries between school and the rest of the world, educational institutions are debating where to draw the line when it comes to regulating student use of the Internet. Many schools now have policies that hold students responsible for their online actions outside of school, and more and more students are being punished for what they post on the Internet. For example, a student in North Carolina was suspended for 10 days for posting an altered picture of his school's assistant principal on MySpace (Student Press Law Center 2005).

These developments have raised First Amendment and free speech issues for students. In 1969, the Supreme Court ruled in *Tinker v. Des Moines Independent Community School District* that high school students have First Amendment rights at school, but speech that "materially disrupts classwork or involves substantial disorder or invasion of the rights of others is . . . not immunized by the constitutional guarantee of freedom of speech" with the burden of proof on schools (U.S. Supreme Court 1969). School administrators now argue that the "substantial disruption" standard from the *Tinker* decision should apply to what students do outside of school, including their online activities. Civil liberties attorneys have countered by saying that what students do and say outside of school should be the responsibility of parents and that schools are

overstepping their boundaries, especially when students are critical of the schools they attend.

Lack of School Instruction With or About the Tools That Students Use

In addition to trying to control students' behavior, many schools ban the tools that students use rather than trying to educate themselves about the technology in order to teach with and about it. However, if schools do not take on the responsibility of teaching students how to use the Internet safely, ethically, and responsibly—and given the inability of many parents to do so—who will? According to many technology standards for teaching and learning, schools should play an important role in this regard. For example, the International Society for Technology in Education's (ISTE) *Standards for Teachers* states that educators should "model and teach legal and ethical practice related to technology use" and "promote safe and healthy use of technology resources" (ISTE 2005b, vi). ISTE's *Technology Standards for Students* further prescribe that

- students understand the ethical, cultural, and societal issues related to technology;
- students practice responsible use of technology systems, information, and software; and
- students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity. (ISTE, 2005a, 2)

Goals such as those described in the ISTE standards are difficult to reach when the tools that are most relevant and meaningful to teenagers are banned from use or discussion on school grounds.

Deeper Rooted Social Issues

Puberty is an awkward stage of life. Teens rapidly go through many physical, emotional, psychological, and social changes while trying to figure out who they are. It is also a stage of life during which many deeply rooted problems emerge, leading to a sense of alienation and behaviors such as bullying and experimentation with sex, alcohol, and drugs. Contemporary society tends to blame technology for these problems even though the problems existed long before the advent of the tools to express them to a large audience. For example, in 2005 school officials of the Northside School District in San Antonio, TX considered holding MySpace responsible for unrest caused at a high school after several students posted threatening messages on the Web site (KSAT.com 2005). While the offending posts were removed and felony charges were filed against the students responsible for the posts, there was no mention in any of the media coverage of an investigation into a pre-existing, deeper, and more serious problem. Blaming the medium instead of closely examining the message is not a new issue. In the past, the media were different—comic books, movies, popular music, television—but they were blamed just the same. Interestingly enough, none of these media have been successfully integrated into the classroom on a large scale. However, it seems that the pervasiveness and importance of digital tools in our rapidly changing society may finally force schools to reconsider seriously the importance of technology for relevant and meaningful teaching and learning.

Implications and Challenges for Schools

The digital age is redefining education. "Literacy in the 21st century is all about participation: the ability to critically consume *and* create knowledge for the betterment of ourselves, our families, and our communities" (Carvin 2006, ¶6). As technology has become the "pen and paper of our time" and "the lens through which we experience much of our world" (Warlick 2006, ¶4), knowing how to use digital and connected technology has become an increasingly important aspect of literacy. We have entered an era in which this technology is fundamentally changing our culture and impacting every aspect of our lives, including education.

Kids value technology in their lives and for learning. However, access to technology in schools is limited, and rather than advocating the effective integration of technology into the learning process, adults too often have

sought to control access to it (Education Evolving 2005; NetDay 2005). Outside of school, kids are digitally connected to a world full of information, a world in which it is important to know how to find, analyze, and synthesize information, discover solutions, and create new knowledge. In our constantly changing world, we can make kids memorize all the information we want, but it "won't make much difference if we don't teach them how to learn first. And they do that not by spitting back at us what they 'know.' They do it by being creative, by trying and failing, by succeeding and reflecting" (Richardson 2006b, ¶3). A major problem is that many educators are still trying to hold on to an idea of schooling that is outdated, a vision in which memorization is still valuable, standardized testing is mandated, and technology plays a relatively minor role. Consequently, students often perceive a disconnect between non-school and school-related uses of technology (Education Evolving 2005; Prensky 2004; Richardson 2006a), leading some to argue that the current educational system is obsolete and needs to be systematically reformed (Daly 2006; Gates 2005).

The education establishment often ignores the ideas and opinions of students when it comes to the issue of technology. However, the Education Evolving project in Minnesota has found that student perspectives can yield crucial insights for policymakers. Based on their survey of students, researchers concluded that kids want to use technology for learning and want more access to diverse digital tools in their school (Education Evolving 2005). While they want to learn to use basic technology and acquire research skills, students also report that they want challenging, meaningful, and interactive instructional activities. Unfortunately, increasing numbers of students at the high school and college levels are becoming less satisfied with their teachers' use of technology because educators are not using the tools with which students are most familiar, even as a greater and more complex use of technology is expected of students in their future careers (Dziuban, Moskal, and Hartman 2005; Oblinger 2003).

At the same time, kids have much to learn from adults. Although students can be very technologically savvy, kids of all ages need to learn how to behave appropriately and protect themselves on the Internet, even if recent research seems to indicate that sites such as MySpace are not inherently dangerous (Rosen 2006). Since virtually anything one posts on the Internet leaves behind what is known as a digital trace, it is open to almost anyone with the means to find it in cyberspace. What teenagers often do not realize is that the communications they intend for their friends on blogging or sharing sites may be read by school administrators, college admissions officers, potential employers, or even Internet predators. Finally, kids need to learn when it is appropriate to network for socialization purposes and when to use social sharing tools for purposes of learning or work. While parents certainly bear their own responsibility in this regard, schools should play their part by recognizing and incorporating such social networking tools as valuable learning resources.

Possible Solutions

Using technology for learning in ways that are relevant, meaningful, challenging, and hands-on is not an easy task. It requires a rethinking of curriculum and pedagogy as well as the spatial and temporal boundaries of education. It necessitates a reevaluation of learning in areas of engagement, individualization, and collaboration. (For one example, see the Ubiquitous Computing Project at Kent State University's Research Center for Educational Technology.) Rethinking teaching and learning should move education away from conventional methods by which kids are told what to learn, when, where, and how. Instead, knowledge should be actively constructed and students should be made responsible for their own learning. The digital age has added new dimensions to learning with newly desirable skills, primarily the ability to connect, collaborate, and network. As a result, constructivist pedagogies may fall short, and educators should explore alternatives such as connectivism (Siemens 2004).

What concrete steps can schools take to get started? First and foremost, technology education and competency must start with parents and teachers. Kids tend to be early adopters of new technologies while adults are often tentative because currently available digital tools were not part of the world in which they grew up. Yet we cannot expect to understand what our kids are doing online or expect them to learn how to be ethical and safe Internet users if we do not set the example. Adults need to learn as much as they can

about new online tools such as blogs, wikis, and podcasting and how they can be effectively used for teaching and learning. Resources abound that would help teachers and parents catch up on the digital tools popular with the children in their charge. To take blogs as one example, useful resources include Andy Carvin's Learning.now, Vicki Davis' Cool Cat Teacher, Wesley Fryer's Moving at the Speed of Creativity, and Will Richardson's Weblogg-ed. Conferences such as the National Educational Computing Conference (NECC) and the recently announced k12online Conference as well as online initiatives like TrustinEducation and the Parents' Edge provide additional information.

Besides engaging with technology, parents and teachers need to build more constructive relationships with children. Open dialogue, which requires a level of trust between adults and children, seems to be the key to resolving many issues surrounding the use of technology in schools today. As Thornburg (2002) describes in *The New Basics*, making fundamental changes in the ways in which we teach and learn is a community effort. Trust building is the essential foundation for such a community effort, and it is crucial for education to move on to the next step: curriculum and pedagogy transformation. As illustrated by Education Evolving, real student involvement in decision-making processes is a key component for success.

The process of curriculum and pedagogy transformation is complex, cumulative, and long term in scope, but one way to initiate the process is to change the curriculum from within. In other words, individual teachers, schools, and school districts should look at how new ways of teaching and learning with 21st-century digital tools can replace more traditional models of education within existing sets of requirements as defined by current state and federal mandates. In addition, the curriculum should be stripped of outdated and irrelevant content and replaced by a model of learning that recognizes that virtually any information can be accessed and manipulated anywhere, anytime, and by anyone. Just adding more content is not the answer. While technology plays an important role in this respect, the greatest obstacle to be overcome is human; parents, teachers, students, and other stakeholders need to come to understand school as a process, not a place (Thornburg 2002).

Conclusion

Digital, connected technology is important in our daily lives, whether it is a teenager accessing her social network on MySpace or adults using communications tools as part of their jobs. Most of us cannot imagine a world without computers or the Internet, yet many schools are still minimizing the role of technology and the skills of networking and collaboration. For example, while it is difficult to imagine a workplace where employees have to share desktop or laptop computers for everyday tasks such as searching the Internet or online communication, we are asking kids in schools to do so more often than not. Moreover, in many school environments, students and teachers are prohibited from using even the most mundane communication channels such as e-mail, let alone instant messaging or social networking tools. Digital tools will not have a real impact on teaching and learning until educators build more genuine relationships with both kids and technology. Only if we create both can we genuinely prepare our children for challenges of the 21st-century world.

References

Boyd, D. 2006. **Identity production in a networked culture: Why youth heart MySpace. Paper presented at the annual conference of the** American Association for the Advancement of Science, St Louis, MO, February. http://www.danah.org/papers/AAAS2006.html (accessed March 30, 2007).

Calo, J. 2005. Pope John blog ban debate continues. *NJ Herald.com*, November 6. http://www.njherald.com/4126690378272.php (accessed March 30, 2007).

Carvin, A. 2006. Happy belated international literacy day. *PBS Teacher Source*, September 12. http://www.pbs.org/teachersource/learning.now/2006/09/happy_belated_international_li.html (accessed March 30, 2007).

Cauchon, D. 2005. Childhood pastimes are increasingly moving indoors. *USA Today*, July 12. http://www.usatoday.com/news/nation/2005-07-11-pastimes-childhood_x.htm (accessed March 30, 2007).

CBS Broadcasting, Inc. 2006. Local school bans popular social website. *cbs13.com*, January 31. http://cbs13.com/topstories/local_story_031233213.html (accessed March 30, 2007).

Daly, J. 2006. Risky business. *Edutopia* 2 (3): 42-47. http://www.edutopia.org/magazine/ed1article.php?id=Art_1497&issue=apr_06 (accessed March 30, 2007).

Dziuban, C. D., P. D. Moskal, and J. Hartman. 2005. Higher education, blended learning, and the generations: Knowledge is power: No more. In *Elements of quality online education*: *Engaging communities*, ed. J. Bourne and J. C. Moore. Needham, MA: Sloan Center for Online Education. http://commons.ucalgary.ca/documents/chuck.doc (accessed March 30, 2007).

Education Evolving. 2005. Listening to student voices—on technology: Today's tech-savvy students are stuck in text-dominated schools. http://www.educationevolving.org/studentvoices/pdf/tech_savy_students.pdf (accessed March 30, 2007).

Gates, B. 2005. Prepared remarks. National education summit on high schools. February.

http://www.gatesfoundation.org/MediaCenter/Speeches/Co-ChairSpeeches/BillgSpeeches/BGSpeechNGA-050226.h (accessed March 30, 2007).

Harris, F. J. 2005. *I found it on the Internet: Coming of age online*. Chicago: American Library Association.

International Society for Technology in Education. 2005a. Educational technology standards and performance indicators for all students. http://cnets.iste.org/students/ (accessed March 30, 2007).

International Society for Technology in Education. 2005b. Educational technology standards and performance indicators for all teachers. http://cnets.iste.org/teachers/t_stands.html (accessed March 30, 2007).

Kornblum, J. 2006. Teens hang out at MySpace. *USA Today*, January 8. http://www.usatoday.com/tech/news/2006-01-08-myspace-teens_x.htm (accessed March 30, 2007).

KSAT.com. 2005. Web site threat empties Warren High School. KSAT.com, November 7. http://www.ksat.com/news/5270714/detail.html (accessed March 30, 2007).

Lenhart, A., M. Madden, and P. Hitlin. 2005. *Teens and technology: Youth are leading the transition to a fully wired and mobile nation*. Washington, DC: Pew Internet and American Life Project. http://www.pewinternet.org/pdfs/PIP_Teens_Tech_July2005web.pdf (accessed March 30, 2007).

NetDay. 2005. *NetDay's 2005 speak up event for teachers and students: Highlights from national findings*. Irvine, CA. http://www.netday.org/downloads/NetDay_2005_Highlights.pdf (accessed March 30, 2007).

Nielsen//NetRatings. 2006. Social-networking sites grow 47 percent, year over year, reaching 45 percent of Web users, according to Nielsen//NetRatings. http://www.nielsen-netratings.com/pr/pr_060511.pdf (accessed March 30, 2007).

Oblinger, D. 2003. Boomers, gen-xers, & millenials: Understanding the new students. *EDUCAUSE Review* 38 (4): 36-47. https://www.educause.edu/ir/library/pdf/erm0342.pdf (accessed March 30, 2007).

Prensky, M. 2004. The emerging online life of the digital native: What they do differently because of technology, and how they do it. http://www.marcprensky.com/writing/Prensky/The_Emerging_Online_Life_of_the_Digital_Native-03.pdf (accessed March 30, 2007).

Richardson, W. 2006a. *Blogs, wikis, podcasts, and other powerful web tools for classrooms*. Thousand Oaks, CA: Corwin Press.

Richardson, W. 2006b. Learning to learn 2. [Weblog entry, July 4.] Weblogg-ed. http://weblogg-ed.com/2006/learning-to-learn-2/ (accessed March 30, 2007).

Romeo, F. 2004. Y'know, for kids! Social software for children. Paper presented at the O'Reilly Emerging Technology Conference, San Diego, CA. http://conferences.oreillynet.com/presentations/et2004/romeo_update.pdf (accessed March 30, 2007).

Rosen, L. 2006. Adolescents in MySpace: Identity formation, friendship, and sexual predators. Dominguez Hills, CA: California State University. http://www.csudh.edu/psych/Adolescents%20in%20MySpace%20-%20Executive%20Summary.pdf (accessed March 30, 2007).

Santrock, J. W. 1993. *Adolescence: An introduction* (5th edition). Dubuque, IA: Wm. C. Brown Communications, Inc.

Siemens, G. 2004. Connectivism: A learning theory for the digital age. http://www.elearnspace.org/Articles/connectivism.htm (accessed March 30, 2007).

Student Press Law Center. 2005. Students increasingly punished for Internet postings. *SPLC Report* 27 (1): 21. http://www.splc.org/report_detail.asp?id=1256&edition=38 (accessed March 30, 2007).

Thornburg, D. 2002. *The new basics: Education and the future of work in the telematic age.* Alexandria, VA: ASCD.

U.S. Supreme Court. 1969. *Tinker v. Des Moines School District, 393, U.S. 503.* http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=US&vol=393&invol=503 (accessed March 30, 2007).

Wallis, C. 2006. The multitasking generation. *Time*, March 27. http://www.time.com/time/magazine/article/0,9171,1174696,00.html (accessed March 30, 2007).

Warlick, D. 2006. Curriculum is dead. *2 Cents Worth*. [Weblog entry, May 22.] http://davidwarlick.com/2cents/2006/5/22/curriculum-is-dead (accessed March 30, 2007).

Note: This article was originally published in *Innovate* (http://www.innovateonline.info/) as: van 't Hooft, M. 2007. Schools, children, and digital technology: Building better relationships for a better tomorrow. *Innovate* 3 (4). http://www.innovateonline.info/index.php?view=article&id=376 (accessed April 24, 2008). The article is reprinted here with permission of the publisher, The Fischler School of Education and Human Services at Nova Southeastern University.